

701 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004-2696  
Telephone 202-508-5527



DAVID K. OWENS  
Executive Vice President  
Business Operations

September 21, 2005

David H. Meyer  
Acting Deputy Director  
Office of Electricity Delivery and Energy Reliability, TD-1  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585

Re: Energy Policy Act of 2005, Section 1234 Economic Dispatch Study

Dear Mr. Meyer:

Thank you for your letter of September 1, 2005, soliciting our assistance in supporting your research through sharing your request with our members. We have widely distributed your request - both the letter and questionnaire - to our members and have encouraged them to respond directly to Alison Silverstein and Joe Eto as you indicated. We are confident that you will receive responses from our member companies that will be helpful as you compile your response to Congress.

In addition, the Edison Electric Institute and its Alliance of Energy Suppliers (together, “EEI”) are submitting these comments to provide a framework for individual responses. The Edison Electric Institute is the association of U.S. shareholder-owned electric companies and international affiliates and industry associates worldwide. The Alliance of Energy Suppliers represents investor-owned electric energy suppliers and marketers nationwide, including affiliate and independent power producers who also own generation facilities that provide electricity to wholesale markets regulated by the Federal Energy Regulatory Commission (“Commission”). Together our U.S. members serve 97 percent of the ultimate customers in the shareholder-owned segment of the industry and 71 percent of all ultimate electric utility customers in the nation. They generate almost 60 percent of the electricity generated by U.S. electric utilities. EEI’s members include electricity generation, transmission, distribution, and service companies that operate in wholesale and retail markets throughout the country.

EEI would like to focus its comments on questions 5 and 6 of the questionnaire that was sent with your letter.

**Question 5)** *If economic dispatch causes greater dispatch and use of non-utility generation, what effects might this have- on the grid, on the mix of energy and capacity available to retail customers, to energy prices and costs, to environmental emissions, or other impacts? How would this affect retail customers in particular states or nationwide? If you have specific analyses to support your position, please provide them to us.*

## **Response**

There are many transmission system limitations and constraints on utility operations that need to be considered and incorporated into dispatch decisions in order to maintain reliability and meet state, regional and federal policy requirements. Such constraints include control voltage and stability issues (must-run units), line and transformer loadings (redispatch), and operating reserve requirements. While the study seeks to identify ways to “improve the ability of non utility generation resources to offer their output for sale for the purpose of inclusion in economic dispatch”, it is imperative to underscore that security constrained economic dispatch is already being employed in traditional as well as organized markets. However, EEI believes it is prudent to periodically review and assess procedures currently in place. With that in mind, EEI would like to offer some observations to consider.

In many states, state commissions have regulatory oversight of generation dispatch with the consumer in mind, i.e., residential, commercial and industrial. These commissions already actively oversee the dispatch process employed by electric utilities under their jurisdiction. They ensure that short-term costs are minimized subject to operational, contractual, and environmental constraints and that other objectives are met, such as maintaining reliability, long-term rate stability, fuel diversity, promotion of renewable resources, and other important criteria. Any study undertaken must recognize the role of the states and not inadvertently undermine the jurisdictional authority that mandates state

commissions to ensure that retail customers are served by low-cost, efficient, and reliable sources of generation from a diversity of sources.

Regional institutions, such as RTOs and ISOs, now exist in many parts of the country that have processes in place that must also be taken into account. The current and evolving dispatch procedures of RTOs and ISOs should not be undermined in an effort to develop a one-size-fits-all model. RTOs and ISOs have FERC-approved dispatch procedures which are tailored to optimize the use of a mix of energy resources available in that respective market. To the extent possible, all units and system constraints need to be in the dispatch model to gain maximum efficiency. Additionally, any economic dispatch model employed must respect the transmission limitations and constraints of the respective system. Furthermore, technical and operational differences between electrical systems do not allow for a one-size-fits-all economic dispatch model.

There could be substantial financial impacts from displacements resulting from a federally-mandated change in utility dispatch procedures. Short-term dispatch decisions are made against the backdrop of existing generation facilities, which in turn are in place as the result of longer-term integrated planning criteria and are often subject to regulatory treatment for continuing recovery of fixed costs. Existing generation plants that are forced to ramp down, go off line, or are displaced to accommodate the dispatch of non-

utility generators under a new government-mandated economic dispatch process could potentially lead to questions of recovery of fixed costs by state commissions. To further illustrate potential stranded costs, many utility generators are encouraged to enter into long-term contracts, e.g. fuel contracts, which include take-or-pay provisions. If utility generation units are displaced by non-utility generators through a forced mandatory economic dispatch that does not consider existing contracts and agreements, and utility generators are not able to utilize, for instance, fuels that they are contractually obligated to purchase, the result could be increased costs to retail customers.

**Question 6)** *Could there be any implications for grid reliability—positive or negative—from greater use of economic dispatch? If so, how should economic dispatch be modified or enhanced to protect reliability?*

### **Response**

There are several potential implications for grid reliability that may result from the inclusion of non-utility generation in the economic dispatch process currently employed by utilities that need to be addressed.

In order to address short-term reliability concerns, if a non-utility generator seeks to be included in a utility's economic dispatch queue, that generator should be subject to a commitment to provide energy to the utility for a specified period of time consistent with

the utility's unit commitment process. To ensure short term reliability, a utility can not be placed in the position of being required to purchase from a non-utility generator that can make an unconstrained decision whether to provide energy to the utility or alternatively to participate in other markets that may provide a better price for their energy at that point in time. Given that the primary obligation of the utility is to provide reliable service to native load customers, a non-utility generator must recognize that the trade-off for being given the right to be economically dispatched by the utility to meet the needs of those native load customers is the requirement for the non-utility generator to enter into a commitment to supply energy to the utility for a specified period of time consistent with the utility's unit commitment process.

In addition to the necessity for all suppliers included in the economic dispatch queue to be subject to the utility's unit commitment process, all suppliers should also be subject to contractual performance standards with associated penalties for failure to deliver.

Conceptually, the inclusion of a generator as a supply source in a utility's economic dispatch queue is identical to having the utility enter into a short-term purchased power agreement with that supplier. To the extent that a supplier generator included in a utility's dispatch queue fails to deliver when dispatched by the utility, that supplier should be subject to a contractual non-performance penalty set at a minimum equal to the cost of the replacement power incurred by the utility.

Finally, it must be recognized that economic dispatch is the last step in the optimized unit commitment process that utilities use to provide the lowest cost energy to the native load customer. Based upon forecasted next day hour demands, utilities determine on a day-ahead basis the optimum mix of generating units that will produce the lowest energy cost in each hour. That committed mix of optimized generating units is then dispatched on an economic basis during the next day. Any regulations that would be developed to address the economic dispatch of non-utility generation units must therefore also cover how such units would be included in the optimized unit commitment process.

### **Conclusion**

EEI appreciates this opportunity to provide comments and looks forward to a continued dialogue on these issues. If you have any questions, please contact me, Kathy Steckelberg, or Richard McMahon at 202-508-5000.

Respectfully submitted,

-Signature-

David K. Owens,  
Executive Vice President, Business Operations  
Edison Electric Institute  
Alliance of Energy Suppliers  
701 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
Phone: (202) 508-5527  
Fax: (202) 508-5600

Cc: Joe Eto [jheto@lbl.gov](mailto:jheto@lbl.gov)  
Alison Silverstein [alisonsilverstein@mac.com](mailto:alisonsilverstein@mac.com)